UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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December 7, 2007

Joy Broach
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P.O. Box 1070
Nashville, Tennessee 37202-1070

SUBJECT: Final Environmental Impact Statement for Center Hill Dam and Lake Project to Revise Operational Guide Curves and Pool Elevations in Dekalb County, Tennessee; CEQ Number 20070474

Dear Ms. Broach:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Final Environmental Impact Statement (EIS) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The Center Hill Project, owned and operated by the U.S. Army Corps of Engineers (USACE), is located on the Caney Fork River in DeKalb County, Tennessee. The Center Hill Dam is a combination earthen fill and concrete structure 2,160 feet long and 250 high. Center Hill Lake, created by the dam, has a drainage area of 2,174 square miles and a surface area of 18,220 acres.

Since construction of the dam in 1951, the concrete and earthen embankments have been plagued with increasing seepage problems. To address these problems, the USACE developed specific dam repair and remediation projects in 2005 and 2006. However, the repairs will take seven to ten years to complete and the risk of potential dam failure will increase during this time. Therefore, the USACE evaluated different interim lake elevations to reduce the hydrostatic pressure and potential risk of dam failure. A total of nine interim pool elevation alternatives (e.g., temporary operating bands or guide curves) were evaluated in the Final EIS, ranging from maintaining Center Hill Lake at normal levels to an emergency drawdown to EL 496. When repairs are complete, Center Hill Dam and Lake would return to normal operations. Alternative 4 is identified as the "Environmentally Preferred" alternative; and Alternative 5 is identified as the "Dam Safety and Engineering Preferred" alternative.

In the review of the Draft EIS, EPA raised environmental concerns related to water quantity and water quality in the reservoir and project dam releases. EPA requested additional risk assessment information related to the difference in dam failure risk for each of the proposed alternatives. EPA appreciates the additional information that was provided to help define the risk of dam failure coupled with downstream consequences for the various alternatives. It is clear that the risk of dam failure is appreciably less at lower Center Hill Lake elevations. EPA continues to support implementation of the mitigation measures described in the Final EIS, including installation of the orifice gate over the sluice gate, blending the turbine and sluice gate

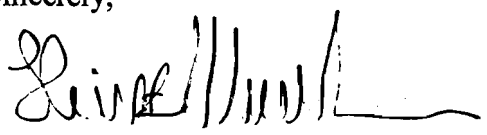
discharges to provide adequate minimum flow releases with higher levels of dissolved oxygen (DO), and the provision of supplemental flows from other Cumberland River tributary lakes. EPA also supports the expansion of current water quality monitoring in the Caney Fork River tailwater to include temperature, DO, flow, and biological integrity (macroinvertebrates and fish community) at three additional locations over the course of the proposed dam repair project.

The Final EIS does not clearly identify the USACE overall preferred alternative for this proposed action. EPA recommends that Alternative 4, the environmentally-preferred alternative, be selected as the initial overall preferred alternative, coupled with thorough monitoring and the ability to allow for deviations to lower lake levels based on the identification of distress indicators. As described in the Final EIS, Alternative 4 represents a breakpoint below which the negative impacts change from predominately minor to moderate or severe. However, it appears that Alternative 5 represents the interim guide curve that will be followed to manage lake levels during dam repairs. Since this alternative is projected to have "severe" impacts to water quality, EPA strongly recommends that the USACE follow a similar decision-making process recently announced for the Wolf Creek Project that would allow for consideration of higher future lake levels at Center Hill Lake. The process should allow for incremental changes in lake elevations depending on the continued satisfactory results of performance indicators and structural improvements to the dam's foundation. This adaptive management approach should allow for opportunities to minimize the long-term environmental impacts of the temporary drawdown.

In summary, while EPA continues to have concerns with water quantity and water quality impacts associated with implementation of Alternative 5, EPA supports the other mitigation measures and monitoring programs as described in the Final EIS. We appreciate the USACE's commitment to implement these practices to protect water quality and aquatic habitat. EPA recommends clear identification of the preferred interim management approach and inclusion of the mitigation commitments in the Record of Decision (ROD) for the project.

We appreciate the opportunity to review the proposed action. Please contact Ben West of my staff at (404) 562-9643 if you have any questions or want to discuss our comments further.

Sincerely,



Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

cc: Tennessee Department of Environment and Conservation